Scientech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

Scientech TechBooks 2121A and 2121B Block Codes are designed to provide conceptual knowledge of error detection and correction by adding redundant bits to actual bit pattern, which are used to represent the code word. Error detection is the ability of the receiver to detect the presence of errors caused by noise or other impairments during transmission by a transmitter. Error correction is the additional ability to reconstruct the original, error-free data.

Features

- On-board clock generation for Data and Code.
- On-board data generator.
- On board error generator block
- BCD rotary switches for Data Selection.
- LED Numeric display.
- Single bit error detection and correction.
- Default and manual H-matrix selection
- Exhaustive learning material

Scope of Learning

- Study of Hamming Code (7,4)-bit Generation
- Study of Hamming Code (Encoding & Decoding) without bit error
- Study of Hamming Code (Encoding and Decoding) of BCD bit sequence in manual mode.
- Study of Hamming Code (7,4)-bit Generation
  - Without error
  - With single bit error
  - With double bit error

Technical Specifications

Crystal Frequency	: 11.059 MHz
Word Length	: 4 bits
Codeword Length	: 7 bits code
Data Format	: NRZ (Not Return to Zero)
Interconnections	: 2 mm sockets (Gold plated)
Test points	: 5 nos
Power Supply	: 110-220 V ±10%, 50/60 Hz
Operating Conditions	: 0-40^{0}C, 80% RH
Internal Power supply	: +5V DC
Weight	: 1.5 Kgs. approximately
Dimensions (mm)	: 326 W × 252 D × 52 H
Learning Material	: Online

Included Accessories :

Patch cord 8"	: 12 nos.
Power supply	: 2 nos.
Mains cord	: 2 nos

Subject to Change